

Listing of Claims:

Claim 1 (Original): A method for inhibiting replication of KSHV comprising administration of a compound that inhibits c-Kit signalling pathway.

Claim 2 (Original): A method for the treatment of Kaposi sarcoma comprising administration of a compound that inhibits c-Kit signalling pathway.

Claim 3 (Original): A method for inhibiting replication of KSHV comprising administration of a compound that inhibits type I sigma receptor signalling pathway.

Claim 4 (Original): A method for the treatment of Kaposi sarcoma comprising administration of a compound that inhibits type I sigma receptor signalling pathway.

Claim 5 (Original): A gene expression profile specific for the lytic phase of KSHV replication comprising at least one gene selected from a group consisting of the genes listed in Table 2.

Claim 6 (Original): A gene expression profile specific for the latent phase of KSHV replication comprising at least one gene selected from a group consisting of the genes listed in Table 2.

Claim 7 (Original): A microarray comprising nucleic acid encoding a probe to hybridize with one or more of the genes selected from a group consisting of the genes listed in Table 2.

Claim 8 (Original): A method for diagnosing KSHV or the stage of KSHV replication comprising:

- a) obtaining a sample of cells suspected of being infected with KSHV;
- b) extracting RNA from the cells;
- c) contacting the RNA with a microarray comprising nucleic acid encoding a probe specific for one or more of the genes selected from a group consisting of the genes listed in Table 2; and
- d) determining the gene expression profile of the sample of cells and comparing it with the gene expression profile of KSHV infected cells.

Claim 9 (Original): A method for identifying modulators of KSHV replication, comprising:

- a) selecting a gene product from a group of genes consisting of the genes listed in Table 2;
- b) combining a test compound with the gene product encoded by the gene to determine whether the test compound inhibits or activates the gene product; and
- c) combining the test compound with KSHV infected cells to determine whether the test compound inhibits or activates replication of the KSHV.

Claim 10 (Original): A method for inhibiting replication of KSHV comprising administration of a compound that inhibits c-Kit and administration of a compound that modulates KSHV replication by a mechanism other than inhibition of c-Kit.

Claim 11 (Original): The method of claim 10, wherein said compound that modulates KSHV replication by a mechanism other than inhibition of c-Kit is selected from a group consisting of daunorubicin, doxorubicin, interferon alpha, retinoids, and taxol.

Claim 12 (Original): A method for the treatment of Kaposi sarcoma comprising administration of a compound that inhibits c-Kit and administration of a

compound that modulates Kaposi sarcoma by a mechanism other than inhibition of c-Kit.

Claim 13 (Original): The method of claim 12, wherein said compound that modulates KSHV replication by a mechanism other than inhibition of c-Kit is selected from a group consisting of daunorubicin, doxorubicin, interferon alpha, retinoids, and taxol.

Claim 14 (Original): A method for inhibiting replication of KSHV comprising administration of a compound that inhibits type I sigma receptor and administration of a compound that modulates KSHV replication by a mechanism other than inhibition of type I sigma receptor.

Claim 15 (Original): The method of claim 14, wherein said compound that modulates KSHV replication by a mechanism other than inhibition of type I sigma receptor is selected from a group consisting of daunorubicin, doxorubicin, interferon alpha, retinoids, and taxol.

Claim 16 (Original): A method for the treatment of Kaposi sarcoma comprising administration of a compound that inhibits type I sigma receptor and administration of a compound that modulates Kaposi sarcoma by a mechanism other than inhibition of type I sigma receptor.

Claim 17 (Original): The method of claim 16, wherein said compound that modulates Kaposi sarcoma by a mechanism other than inhibition of type I sigma receptor is selected from a group consisting of daunorubicin, doxorubicin, interferon alpha, retinoids, and taxol.

Claim 18 (Original): A method of doing business comprising the steps of:
a) determining the level of RNA expression for an RNA sample, wherein said RNA sample;

- b) is amplified and fluorescently labeled, hybridized to a microarray containing a plurality of nucleic acid sequences representing a gene expression profile, and said microarray is scanned for fluorescence;
- c) normalizing said expression level using an algorithm; and
- d) scoring said RNA sample against a gene expression profile database.

Claim 19 (Original): The method of claim 18, wherein said RNA sample is obtained from a patient.

Claim 20 (Original): The method of claim 19, wherein said RNA sample is isolated from a patient sample selected from the group consisting of blood, amniotic fluid, plasma, semen, bone marrow, and tissue biopsy.

Claim 21 (Original): The method of claim 18, wherein said microarray is a DNA microarray.

Claim 22 (Original): The method of claim 18, wherein said database is available via a web-browser interface.

Claim 23 (Original): The method of claim 18, wherein said web-browsér provides gene sequence analysis tools.

Claim 24 (Original): The method of claim 18, wherein a user pays a fee for access to said database.